Available online at www.sciencedirect.com

SciVerse ScienceDirect

Procedia - Social and Behavioral Sciences 51 (2012) 420 – 426

Procedia Social and Behavioral Sciences

ARTSEDU 2012

Opening the "black-box" of interior design education: The assessment of basic design project work

Işıl Ruhi Sipahioğlu[a]*

[a]*TOBB University of Economics and Technology, Department of Architecture, Söğütözü Cad, no.43, Söğütözü, Ankara 06560, Turkey*

Abstract

Interior design education differs from education in other disciplines due to its use of design studio as the setting for project based reflective learning environment. This setting is criticized for being a pedagogy derived from a preexisting 'apprenticeship' model that reproduces prevalent and dominant notions of "architectural habitus." This paper carries out a case study on the first year basic design course of 26 interior architecture students in Turkey over one semester to discuss how "thinking like an architect" has been transmitted by critics to the new members of the profession.

Keywords: Interior design; design education; pedagogy; design jury; *habitus*

1. Introduction

Interior design education and architectural education differ from education in other disciplines due to its use of design studio as the setting for project based reflective learning environment. This setting is currently criticized for being a pedagogy derived from a preexisting 'apprenticeship' model that reproduces prevalent and dominant notions of "architectural *habitus.*" Considering this critique becomes crucial in case of first year basic design studio, owing to its role in introducing students with the required skills for becoming a reflective practitioner. Architectural education does not foster these reflective skills just through the transfer of know-how. Instead they are developed by the students over the studio courses and design juries.

The paper conceives design juries as a key pedagogic critic-centered event, rather than an examination in educational curriculum. Current literature on design juries handles a large number of topics, of which this paper mentions but a few: Discussions on the effectiveness of different techniques in design juries (Seymour, 2008), emotional and general psychological issues in design studio (Ochsner, 2000), knowledge and its transfer in the studio (Uluoğlu, 2000), discussions on assessment criteria (Çıkış & Çil, 2008; Uzunoğlu & Uzunoğlu, 2011). However, most of these sources do not carry out an in-depth analysis of jury member-student exchanges and "there continues to be considerable disagreement about what is learnt and how" (Webster, 2007) in juries. On this disagreement Webster states that

> [w]hile critical pedagogues argue that the design jury is a critic-centred event that coerces students into conforming to hegemonic notions of *habitus*, those who promote reflective practice see it as a

* Işıl RUHİ SİPAHİOĞLU. Tel.: +90-312-2924000 / 5768
E-mail address: iruhi@etu.edu.tr

 doi:10.1016/j.sbspro.2012.08.183

> student-centred event in which a critical dialogue with experts supports students' construction and reconstruction of their own *habitus*. (2007)

So the question is whether critics should dictate what a designer should do according to their formulations or whether they should act as facilitators who help students to discover their own formulations.

To address this question, the paper carries out a case study on the first year basic design course of 26 interior architecture students in Turkey over one semester to discuss tacitly generated 'architectural *habitus*' during the design juries. By devising a dense representation of the design jury, the paper analyzes the final jury with particular attention to how "thinking like an architect" has been transmitted by critics to new members of the profession, that is, how the espoused theory of the professors is communicated to the students. The researcher observed (as a participant) the course, two interim juries and the final jury. To analyze the final jury, the researcher made a content analysis to indicate themes across students' and critics' verbalizations, and then conducted a protocol analysis to reveal the relationships among verbalizations.

2. Design Juries

Good assessment is explained to have two purposes: Guiding, motivating and reinforcing student learning; and assuring "academic institutions that academic standards are being maintained" (Webster, 2007). This paper focuses on the first purpose, which is very much like a 'black-box' as how critics actually guide and motivate students needs to be analyzed more thoroughly. Previous researches underline that most professors in design schools lack "pedagogical training, and they, like their students, "learn by doing"; the quality of their teaching is contingent on their experience, awareness, and talent" (Goldschmidt, Hochman, & Dafni, 2010, p .286). In a nutshell, this is the apprenticeship model.

There is no universally accepted design teaching theory or pedagogy in architecture. However, to interpret case studies, we need to define a level of, maybe not excellence, but a stepping stone to compare the analyzed data. Hence, the paper refers to J. K. Ochsner's research, which gives us a psychoanalytic perspective on interactions between instructors and students within the studio environment (2000). Ochsner compares the interaction between studio instructor and students to the psychoanalytic relationship between therapist and patient. To improve crits in design studios, he suggests gaining insight from the psychoanalytic methods, which is built upon a process that reveals and actually mirrors the thoughts of people to themselves. This approach is actually concurrent with the pedagogy espoused by the case study basic design course. Likewise, Ochsner, especially referring to interactions with beginning students, proposes guidance and motivation tactics for studio instructors as follows:

> The challenge to the studio instructor, however, is twofold: first, to make critiques in such a way that the student sees the work as a valid, if failed, attempt –that is that the nature of creative play is that it sometimes does lead to "dead ends;" and second, to provide an interpretive focus that not only indicates problems, but also reveals opportunities or possible directions for further exploration. In this sense, even critique can be seen as interpretation –that is, it is important not just to tell the student what is a problem, but to show the student that possibilities nonetheless can be sought in what the student has offered (2000, p.206).

Especially for beginning students, who are foreign to the design process, he encourages instructors to reveal possibilities within their designs so that they would take risk, would not use psychic defenses for the sake of achieving some success.

2.1. Background to the case study

The present case study is based on the final design jury of the basic design course of a department of interior architecture. The course lasted 12 weeks with two meetings, each lasting 4 hours. As a student-centered studio, this course does not intend to teach design, but to enable students to find out how they would design. To do this, the course curriculum is built upon ways to detach students from their studying habits, while intending to make them discover their own way of designing, that is, their own language. In this discovery process, "the important issue is to focus attention on the thought processes that lie behind the design" (Sağlam, 2012). So, how the meaning or the

intention of the designer can be expressed by an architectural language was not explained to freshmen by lectures. Instead, the course proceeded with the assignment of various design exercises just after the first meeting to throw them in at the deep end and keep them on track by bi-weekly group crits and two interim reviews. The projects for the final jury included the design of an installation project for the studio where the course was held, and the design of "entrance, passage, arrival." The researcher attended the entire course as a participant teaching assistant. The critics were the researcher, the teacher of the course, and faculty members from the department of architecture and interior architecture.

To analyze the jury, the paper uses protocol analysis. The whole jury was recorded, transcribed and divided into verbalization units. This unit is each spoken output by the participants (critics and students). Although the length of each unit differs, the paper focuses on the general intention of this verbalization. This research is still ongoing and this paper refers only to the juries of six students, chosen intentionally from two morning sessions, one mid-day session and two afternoon sessions. For the anonymity of the students and jury members, the paper consecutively calls the students as S and the critics as P. The paper adapts two methods, namely, coding of speech units and linkography, which were actually used in protocol analysis by Goldschmidt, Hochman, & Dafni (2010) to analyze communications in desk crits.

2.2. Coding

The coding of each unit aims to reveal the knowledge, the questions or the suggestions conveyed to the students. To devise the categories (see Table 1), the paper first conducted a literature review on researches with similar categorization acts (Uluoğlu, 2000; Goldschmidt, Hochman, & Dafni, 2010) and then re-read line by line all the transcriptions.

Table 1. Category scheme

	Category	Examples
1	Report/Analysis/Review	That means it is not designed for human use
2	Questions for better understanding	Where are those roads leading to?
3	Mistakes/Questions to raise awarness/expression of dissatifaction	You designed something which is two dimensional. Are you aware of this?
4	Reminders/General design issues/principles	You are going to be an interior designer, this profession means… You should design the space, and touch the volume. That's the reason why you should consider the dimensions of this classroom. You should draw reference from this space…
5	Proposals for improvements/operative	If you were to close this opening, I would be able to enter this space and turn and turn. It would then have a philosophical base…
6	Reference to built examples/associative	There is a restaurant in Amsterdam called … This restaurant is designed according to these criteria…
7	Positive evaluations/encouragement/ directive	You used color, you differentiated between objects, you tried to design a pattern
8	Informal	Shall we go on with the other project?

2.3. Linkography

Depicting the jury process meant also determining the networks among verbalization units. For this purpose the linkography was used. This allows the communication to be analyzed according to who, how, and by referring to which unit (Goldschmidt, Hochman, & Dafni, 2010, p.287). To establish the links among units, starting from the second unit the researcher asked whether that one has any relationship to the units preceding it. So the answer is *yes* or *no*. In this way backlinks among verbalizations are defined. When the graph is completed for backlinks, it is possible then to infer the forelinks that shows links among verbalizations and subsequent ones (See Figure 3 in the section 3.2 for the linkography of S2's jury). Links are considered to be representatives of process properties. They are considered to be critical.

3. Case Studies

All tables should be numbered with Arabic numerals. Headings should be placed above tables, underlined and centred.

Each jury focuses on the evaluation of the same two projects. While the jury members of S2, S9, S10, and S12 are P1, P2, P3, P4, P5, P6, and P7, the members of S4 and S5 are P2, P3, P4, and P8. For the comparative analysis, first the analysis of category distributions are given and linkographies versus categories are discussed.

First of all, we should admit that even though the paper gives quantitative data for the comparative analysis, it cannot perform quantitative analysis. However, the analysis of the jury of S4 and S5 represents notable differences among category distributions. A brief summary of the verbal output (Table 2) and links among participants are given below (Table 3) for reference purposes.

Table 2. Verbalizations across juries

	S2	S4	S5	S9	S10	S12
Verbalizations						
Student	37,25%	41,51%	35,45%	28,57%	32,76%	28,49%
Jury members	62,75%	58,49%	64,55%	71,43%	67,24%	71,51%
Words						
Student	30,16%	37,25%	35,45%	27,69%	39,12%	29,97%
Jury members	69,84%	62,75%	64,55%	72,31%	60,88%	70,03%
Mean words/ verbalization	13,76	9,96	13,87	14,27	16,31	10,48
Student	18,92	11,59	13,87	14,90	12,37	9,76
Jury members						
Duration of jury	13:24,7	16:11,4	14:55,2	17:50,9	13:09,2	13:39,6

Table 3. Links among verbalizations across juries

	Student-Student	J. Member-J. Member	Student – J. Member
S2	5,08%	23,73%	71,19%
S4	7,07%	23,91%	69,02%
S5	9,03%	37,50%	53,47%
S9	3,83%	49,76%	46,41%
S10	10,56%	27,33%	62,11%
S12	6,15%	35,77%	58,08%

3.1. Category distribution

In the following, first the distribution of categories per jury (Figure 1) and a mean across categories of critics' verbalizations are given (Figure 2).

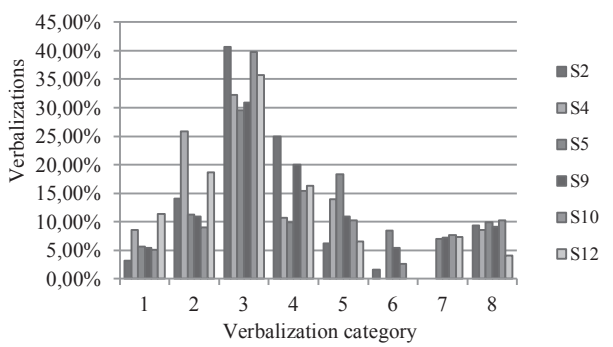

Figure 1. Category distribution in critics' verbalizations

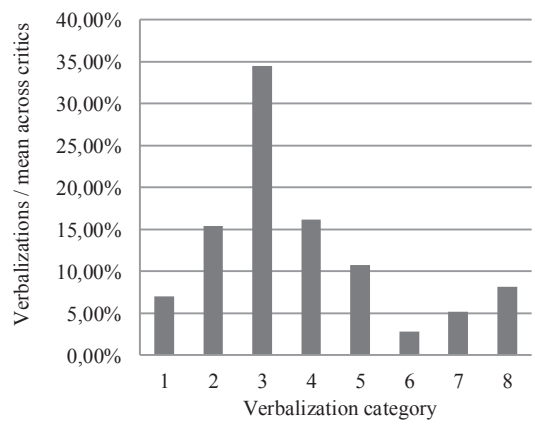

Figure 2. Means of critics' verbalizations across categories

As noted in Section 2, the pedagogy of Oschner's deciphered design studio course and the case study studio course are compatible in that they both intend to facilitate the student's discovery process in designing. With reference to the purposes of a good assessment and Ochsner's suggestions, analysis on the content of each category attempts to reveal how "architectural *habitus*" is communicated by critics.

1st category verbalization (CtV) (7,05%) include interpretations, given in a neutral manner, made on the students' projects. In the same manner, *2nd CtV* (15,40%), includes questions to understand what the student intended to do,

without a negative evaluation. The researcher observed that beginning students are perplexed in explaining their thought process or design concepts. According to the studio-centered studio setting, it might be expected that the critics mirror the students' thoughts to themselves, and thus help the students to clarify their thoughts and better formulate their design concepts or final products with *1st CtV* and 2nd CtV. However, except for a few, questions and comments in these categories are mainly related with clarification of drawings or models. Only in S4's and S5's juries, one critic acts as facilitator, by using these verbalizations.

The analysis reveals that such interpretations fall in 3rd *CtV* (34,51%) and they are full of negative evaluations on lacks in models and drawings, and mistakes concerning design principles. A few of these interpretations are found in 4th CtV, but this category includes comments on major design principles and how architects work. The language used in 4th CtV is usually normative. These explanations are not based on the actual design work of students; however, they are explained as the basic beliefs of the profession. For beginning students the share of 3rd *CtV* might be considered quite imbalanced. Positive evaluation which fall in the 7th *CtV* comprises only 5,19% of the entire verbalizations, so the students cannot see their project as valid. Comments given in such a negative manner might discourage the students from risk taking, and they might also develop several tactics to survive in juries.

As formulating the thought that lies behind the form is difficult for beginners, they need more examples to understand abstract architectural notions. However only 2,78% of the verbalizations are from the 6th CtV. Presenting examples or so called associative knowledge (Uluoğlu, 2000) has been suggested as a powerful tool in design education. Such knowledge does not actually dictate a design principle to the student. Instead it enables the student to think about how other people achieved the final products. Despite this fact, such CtV are rare in the analyzed jury sessions.

It might be valid to argue that except for S4 and S5's juries, all the analyzed juries were inadequate in allowing the student to discover their form making process. The 3rd and 4th CtVs are seen to be effective only to articulate what Webster calls hegemonic notions of *habitus*. They thus remain as the expression of the espoused theory of the professors.

3.2. Analysis of linkographies versus categories

Formulating and expressing the design concept of their project are seen to be the main difficulties faced by students. Arguably, they still lack architectural terms, or as uttered by one student "jargon", to better explain their ideas. Forelinks stemming from the verbalizations of students are seen to remain low and limited only to the explanations of design concepts and problems in drawings. According to the findings of the category and linkography analysis, critics' comments on these design concepts reveal two different approaches.

The first approach: When the design concepts are evaluated positively, the students receive comments categorized under 1st CtV and 2nd CtV. Besides surfacing the students' concepts or intentions, they give incentives for better reformulations. The 4th, 7th and 5th CtVs are either based on the final product or give reference to it. Whenever the design proposal is concurrent with the design concept, the jury does not detail the premises of the final product, as in S9's and S10's juries for their second projects. If not, in the case of S5's first and S9's second projects receive more 5th CtV to improve their designs.

The second approach: When the design concepts are considered to be inappropriate for an architectural project, it continually receives 3rd CtV with negative evaluations and questions that are later related to 4th CtV. As in case of S2's first and second, S4's first, S9's first, S10's first, S12's first and second projects, the critics remained inadequate in furthering the design proposals, and the discussions fall mainly in the 4th CtV, which reinforces the transfer of general theories espoused by critics. If we open up this dichotomy, the first part of the jury process that lacks 1st and 2nd CtV, especially in S2's, S9's first, S10's first and S12's juries, left the students without any guidance for better explaining their thoughts, concerns and actually needs, as observed from the category distribution in critics' critical verbalizations as a mean across juries of these students. The first part of all these students is full with comments stemming only from one verbalization of students.

By contrast S4's and S5's juries are seen to conform to Oschner's suggestions and their linkographies reflect this situation with side by side links, including comments by students. These processes diverge from the other cases. P8

acts as a facilitator who, by asking questions, helps students in reconstructing their thoughts and gives them comments from the 6th CtV. Thus the students are well-equipped to internalize what has been said.

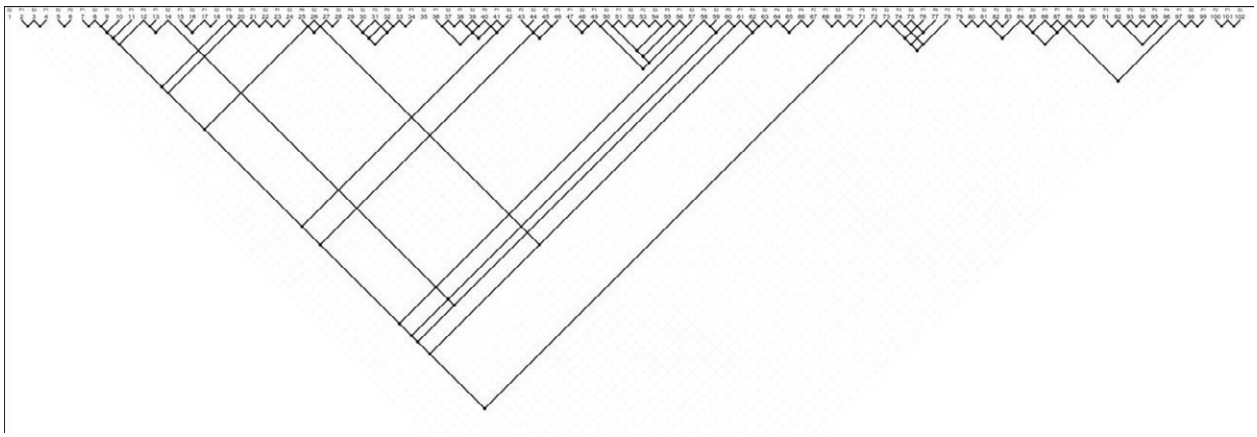

Figure 3. S2's full linkograph

Whenever a project fulfills expectations, the conversations remain low and the premises of 'good' projects are not discussed in detail by only using the 7th CtV. We might therefore argue that learning from mistakes is seen to be justified, leaving alone the good ones to be discovered by students. As the 'good' ones are not thoroughly discussed, they remain in a "black-box" for students.

Proposals for possible opportunities to improve their projects, included in the 5th CtV (10,76%) are detached from the 3rd CtV. Critics do not intend to include both type of verbalizations in one utterance. This specific sentence "What if you were to do…, you would be able to …" stand far apart from the 3rd CtV in the jury discourse. The linkographies also reveal communication problems among critics. There are many ruptures among verbalizations of the critics, which might be due to the fact that they do not pay attention to what another critic says. These ruptures might impair student attention.

Especially students like S2 and S10 continuously refer to their earlier verbalizations, whenever inquired by critics, and they don't seem to internalize the critiques. This might be related to the fact that most of the verbalizations are in the 3rd CTV, and attack the designs without any comment on the premises of the projects. Especially S9 and S12's juries are interesting because the students seem to be detached from the discussions as listeners, given that 49,76% of all links are among critics. However towards the end of the jury, S9 asks the members whether or not the presented designs had nothing worth to speak of, and it is only after that the critics realize the need of the student to receive more CtV in the 5th and 6th categories (i.e. ways to improve the design proposals). This suggests that the critics act more in the transmission of their ideas, instead of empowering the students to understand problems. Thus the jury discourse comes across as 'a monologue among critics.'

4. Conclusion

While delving into the communication acts in the jury process through the generation of communication network, this paper has intended to unveil complexities along the process that might later feed researches on design pedagogy theory and practice and open new research tracks for improving educational discourse in architectural design. This paper demonstrates jury communicative processes in a basic design course in interior architecture department. Herein will only be given some suggestions based on the analysis of these processes. Jury communications across critic-student and also critic-critic must ensure the effectiveness of the learning environment by communicating accomplishments and lacks of students depending on their needs. These needs are not limited to the evaluation of final product or its design process. Jury members need to accommodate student verbalizations. As pointed out by the

findings of this research, students may not integrate comments from critics into their design thinking processes and thereby always refer back to their original arguments, which are not nourished by the jury process. A good jury session is defined to have a balance among each category. However the network shows us that they need to be given in a coherent manner in the discourse.

As comments seem not to build on students' own ideas and design concepts, the final jury remained as a setting that coerces students to conform to a tacit architectural *habitus*. However, beginners cannot internalize jargons only through comments in the 3rd and 4th CtVs, which remain in the realm of theories and general design principles. Rather, they need concrete examples feeding their intellectual background.

Acknowledgements

I would like to thank the first year students in the Department of Interior and Environmental Design and the jury members at the Faculty of Fine Arts at TOBB University of Economics and Technology.

References

Çıkış, Ş., & Çil, E. (2009). Problematization of assessment in the architectural design education: First year as a case study. *Procedia Social and Behavioral Sciences*, 1, 2103-2110.

Goldschmidt, G., Hochman, H. & Dafni, I. (2010). The design studio "crit": Teacher–student communication. *Artificial Intelligence for Engineering Design, Analysis and Manufacturing*, 24, 285–302.

Ochsner, J. K. (2000). Behind the Mask: A psychoanalytic perspective on interaction in the design studio. Journal of Architectural Education, 53, 194-206.

Sağlam, H. (2012). A proposal for the first year design education in interior design. Paper presented at 1st International Conference on Architecture & Urban Design, April 19-21.

Seymour, M. (2008). Beginning design students' perception of design evaluation techniques. Paper presented at 24th National Conference on the Beginning Design Student, Georgia Institute of Technology.

Uluoğlu, B. (2000). Design knowledge communicated in studio critiques. *Design Studies*, 21, 33-58.

Uzunoğlu, K. & Uzunoğlu, S. (2011). Project evaluation process with classified objective criteria in architectural education. *Procedia - Social and Behavioral Sciences*, 28, 1004-1010.

Webster, H. (2007). The Analytics of power: Re-representing the design jury. Journal of Architectural Education, 60, 21-27.

Webster, H. (2007). The Assessment of Design Project Work. *CEBE Briefing Guide No.9*. Retreived from http://www.heacademy.ac.uk/assets/cebe/documents/resources/briefingguides/BriefingGuide_09.pdf. Accessed December 20, 2011.